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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,362	11/14/2001	Jun Akiyama	70904 (56693)	5592

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EXAMINER

POLTORAK, PIOTR

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/992,362

Applicant(s)

AKIYAMA, JUN

Examiner

Peter Poltorak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 17-24 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claim 1-16, drawn to a method of recording and reproducing information, the recording medium and recording and reproducing apparatus, classified in class 380, subclass 201.
- II. Claim 17-24, drawn to the process of manufacturing a recording medium, classified in class 380, subclass 210.

The inventions are distinct, each from the other because of the following reasons:

Groups I and II are related as process of manufacture and a method of using as well as the product that's made.

In the instant case, group I has separate utility such as recording and reproducing that is carried out non-continuously and in more than in one apparatus. Group II has separate utility such as pre-recording onto each information recording medium characteristic information that distinctively characterize the medium and can be used in copyright protection of the medium content. See MPEP § 806.05(f).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group I; a method of recording and reproducing information, the

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recording medium and recording and reproducing apparatus is not required for Group II, the process of manufacturing a recording medium, restriction for examination purposes as indicated is proper.

1. A telephone call was made to Steven Jensen (617-517-5531) on 3/14/05 to request an oral election to the above restriction requirement. Group I (*claims 1-16*) has been elected (*on 3/18/05*) with traverse.
2. Claims 1-16 have been examined.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 11/22/2000.

Claim Objections

4. Claim 1 as written does not allow determining a clear line between the claim limitations and the preamble. It is not clear where the preambles finish and where the limitations begin.

Since claim 1 is a method claim it is assumed that the preamble ends in line 10 (with the word "format").

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

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pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 4 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
6. Claims 4 and 12 recite: "the second format is adapted to reproduce information in a condition of better quality than that of the first format". However, the specification does not teach how the second format reproduces information in a condition of better quality than that of the first format.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention.
8. Claim 1 is indefinite because it is narrative in nature, there are no clear steps and the claim language is confusing. Also, the claim as written does not make a distinction between the preamble and the claim limitations. As a result the claim will be treated as best understood.
9. The term "predetermined recording system" in claims 11 and 16 is not understood.
10. The term "better quality" is an abstract concept rendering claims 4 and 12 indefinite.

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11. The term "error correcting systems" in claims 10 and 15 is not understood. Even though the term as used suggests that it is some kind of apparatus the claim language suggests that the systems are a part of the first and second formats.

12. Also, the statement in claims 4 and 12 suggesting that the *format* is capable to reproduce information in a condition is not understood.

The specification does not provide a clear definition of the "format" and any statements listed in the specification in regard to the format suggest that the format can be used to reproduce information, and not that the format reproduces (or is capable to reproduce) the information.

13. Claims 9 and 14 recite: "a modulation system of the first format is different from that of the second format". The statement is not understood. The specification suggests that the term "modulation system" is some kind of operation on signals (e.g. FM, MFM etc.) However, claim 9, which uses the term "modulation system", is directed to describing a recording medium. Also, the claim language as written could be interpreted as having multiple meanings: the modulation system could be a part of the format or it could be an entity that operates on the modulation system for example. As a result it is not clear what the "modulation system" (as claimed) represents.

14. The term "sole recording means" in claim 11 is not understood. The term is treated as "recording means".

15. Claims 2-3 and 5-8 are rejected by virtue of their dependence.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 1-3, 6-8, 11, 16 are rejected under 35 U.S.C. 102(b) as being anticipated by

Hirata et al. (European Pub. No. 0989553A2, hereinafter Hirata).

17. As per claims 1, 2, 11, and 16 *Hirata* teaches a record medium (disk, Fig. 4),

wherein information (content data) is recorded in a format different from encryption information (characteristic information (DI)) [62] and [65].

The encryption information is used to encrypt/decrypt the information [71].

18. As per claim 3 it is inherent that recording regions are blank before information is recorded.

19. Fig. 4 and [64] read on claim 6.

20. *Hirata et al.* teach limitations of claims 7 and 8 in [60-61].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 4-5, 9 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Hirata et al. (European Pub. No. 0989553A2)* in view of Official Notice.

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22. As per claims 4-5 and 12-13 (as best understood) *Hirata et al.* teach the information

recorded in the first format and the encryption information recorded in the second.

Hirata et al. do not explicitly teach that the second format is adapted to reproduce information in a condition of better quality than that of the first format and that the recording density of the second format is lower than that of the first format.

Official Notice is taken that it is old and well-known practice to compress (increase the density) of the multimedia. Multimedia material is relatively space intensive and one of ordinary skill in the art at the time of applicant's invention would employ compression of multimedia to lower the space requirement so the multimedia material could be fit on recording mediums such as CD and DVD.

It is also well-known in the art that compression may decrease fidelity of data when the data is replayed. The encryption information in *Hirata's et al.* teaching is essentially a decryption key that is used to decrypt the rest of the content on the recording medium. One of ordinary skill in the art at the time of applicant's invention would restrain from compressing the encryption information to avoid any chances for the encryption information being infidel, since as taught by *Hirata et al.*, any deviances in the encryption information from the original would prohibit decoding the content of the disk [21].

23. *Hirata et al.* teach the limitations of claims 9 and 14 (as best understood) in [65]. The first format modulation differ from the second format modulation [62] and [65].

24. Claims 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Hirata et al.* (European Pub. No. 0989553A2) in view of Official Notice and in further

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view of Pfleeger (*Charles P. Pfleeger, "Security in computing", 2nd edition, 1996, ISBN: 0133374866*).

25. *Hirata et al.* teach the first format and the second format as discussed above.

Hirata et al. do not explicitly teach an error correcting system of the first format and a different error correcting system of the second format.

Pfleeger teaches an error correcting system (*checksum, Pfleeger pg. 167 "Cryptographic Sealing" section*).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement the error correcting system as taught by *Pfleeger* within the first format and the second format. One of ordinary skill in the art would have been motivated to perform such a modification in order to ensure data integrity (*checksum, Pfleeger pg. 167 "Cryptographic Sealing" section*). Checksum (hash) for different data is inherently different.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571)272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Signature

Date

3/18/05

Greg Morse

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SUPERVISORY PATENT EXAMINER
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